August meet, we had a small turn out, normal for summertimes, but I've also noticed that some of the most interesting meets occur in the July-August period. More demos and talks. Dave Shoenwetter gave a talk on printer interfacing and how to generate graphics on an Epson type dot matrix printer. The pending release of the Computus Interrupts Series in print and disc, and how to generate more attendance at meetings was also discussed. My Zenith monitor gave up the green a couple of weeks ago, John Colonna was kind enough to loan me his spare monitor. At the meet, the society purchased from Hal Sohn, a used green Zenith monitor as part of the group owned system. The Oliger disc IF SAFE ROM chip was upgraded to the last in the series, a V2.52. I asked for and those present voted to have the society purchase a Larken DOS cartridge. Given Bill Jones' report of using LKDOS along side the Oliger DOS, along with increasing our disc swapping abilities with the many Larken users, it seemed like a worthwhile investment in our disc system. Dave Shoenwetter also donated a TS 2068 power supply to the society disc system.

Our current system includes, a TS2068 (from Carl Morris), a 2068 power supply, two disc drives (from Dave) and a society purchased Oliger disc interface, (LKDOS cartridge), disc power supply and cabient and Zenith green monitor. The "portable" system is held together with a steel base, power strip, and brackets donated, bent and screwed together by yours truly. Much time and talent was donated by all to get us to this point, but the results of the sale of CLONE by Wes Brzozowski enabled us to make this purchase.

Rest of the 1988 schudule-below; Vestal Library, 7p on Wednesdays. For 1989, it will be the 3rd Wednesday of each month, same time and place.

Our local BBS, TCCS is down and gone for good. Scott Wiltsey, the SYSOP is going to college and taking his computer with him. For four years Scott ran TCCS, and I have had the privilege of using it for the past two. SINCUS enjoyed its own conference on TCCS for the past year and a half. All good things must end, and so to Scott we say Thank you and best of luck in school.

ZX/81-TS1000 Tips—————————————————by Don Lamen, SINCUS

9. Using a pocket calculator to convert decimal addresses (generally 5 numbers) to hexadecimal addresses(four digits):
[An example will parallel the instructions 29279]

a) Zero calculator and memory.		
b) Enter decimal address.		>29279<
c) Add it to memory.		m 29279
d) Divide by 4096.	29279 / 4096 = 7.1481933	
e) Write down the Interger part of the result.		7___.
f) Multiply 4096 by the Interger.	7 x 4096 = 28672	
g) Subtract the result from memory.	m 29279 - 28672 = 607	
h) Recall memory.		rm 607

The Interger obtained in step (d) is the <u>most significant hexadecimal digit</u>. If above 9, change it to the equivalent hex letter A to F. A=10, B=11, etc. For the next hex digit repeat steps (d) to (h) using 256 in place of 4096.

d) Divide by 256.	rm 607 / 256 = 2.3710937	
e) Write down the Interger part of the result.		72__.
f) Multiply 256 by the Interger.	7 x 256 = 512	
g) Subtract the result from memory.	m 607 - 512 = 95	
h) Recall memory.		rm 95

Follow the same process for the third hex digit using 16 in steps (d) and (f). The number resulting from step (h), after using 16, is the last and least significant digit of the hex address.

d) Divide by 16.	rm 95 / 16 = 5.9376	
e) Write down the Interger part of the result.		725_.
f) Multiply 16 by the Interger.	5 x 16 = 80	
g) Subtract the result from memory.	m 90 -15 = 15	
h) Recall memory.		rm 15
Convert remainder to hex, in this case 15 = F in hex.		<u>725F</u>

Giving the complete hexadecimal number of 725F.

Note: m and rm are memory and recall memory tags.

In any step after the most significant digit, should the result from step g = 0, the hex digit of 0 would be the digit used to finish the four place hexadecimal code. eg. Decimal address 28672,

step:	a) clear memory	
	b) enter address	28672
	c) add to memory	m 28672
	d) Divide by 4096	28672/4096 = 7
	e) Write the interger	7___
	f) Multiply 4096 by interger.	4096 x 7 = 28672
	g) Subtract result from memory	m 28672 - 28672 = 0
	h) Recall memory	rm 0

This then completes the hex code, <u>7000</u>.

10. Using a pocket calculator to convert hexadecimal addresses to decimal addresses: If hex 0, then Decimal 0
[Using the same sample number, now 725F, find the decimal equivalent.

a) Zero calculator and memory.
b) Enter the decimal equivalent of the most significant digit of the hex address.   7___.
Use table below to convert letters to numbers, F = 15.
c) Multiply by 4096.   7 x 4096 = 28672
d) Add the result to memory.   m 28672
e) Enter the decimal equivalent of the next most significant hex digit. _2__.
f) Multiply by 256.   2 x 256 = 512
g) Add result to memory.   rm 28672 + 512 = 29184
h) Enter the decimal equivalent of the next hex digit.   __5_.
i) Multiply by 16.   5 x 16 = 80
j) Add result to memory.   rm 29184 + 80 = 29264
k) Enter the decimal equivalent of the last hex digit.   15= ___F.
l) Add it to memory.   15 + 29264 = 29279
m) Recall memory.   rm 29279

        The calculator will now display the decimal address.   29279

NOTE: Dec. Intergers: 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
      Hex digits: 0 1 2 3 4 5 6 7 8 9 A   B   C   D   E   F

11. Here is a short program for converting Decimal and/or hexadecimal numbers to SINCLAIR Floating Point Numbers. Use Positive Intergers only.
     To copy the results on your printer, stop the conversions by pressing ENTER. The press the "Z" key for COPY, then ENTER. Make sure your printer is on before pressing ENTER for COPY.
     Next time I will give you a couple of useful routines that uses Floating Point Numbers.

```
  1 REM ZZZZZZZZZZZZZZZZZZZZZZZ        80 IF LEN A$/2-INT (LEN A$/2)=
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ        0 THEN GOTO 140
  5 REM  "F.P. -NUMBER"                90 IF LEN A$<1 OR LEN A$>5 THE
 10 LET A=16514                       N GOTO 60
 20 PRINT TAB 6;"WHEN ENTERING        100 PRINT TAB 9-LEN A$;A$;" D",
ADDRESSES IN DECIMAL NUMBERS KEEP     110 POKE A+1, INT (VAL A$/256)
 THE NUMBER OF DIGITS ODD BY PRE      120 POKE A, VAL A$-256*INT (VAL
FIXING A 0  WHERE NEEDED. WHEN E      A$/256)
NTERING HEX A-DECIMAL NUMBERS KEEP    130 GOTO 180
THE NUMBER OF DIGITS EQUAL TO 4       140 IF LEN A$<>4 THEN GOTO 60
.";AT 20,16;"PRESS ENTER"             150 PRINT TAB 9-LEN A$;A$;" H",
 30 INPUT A$                          160 POKE A+1,16*CODE A$+CODE A$
 40 CLS                               (2)-476
 50 PRINT TAB 4;"ADDRESS","F.P.       170 POKE A,16*CODE A$(3)+CODE A
-NUMBER"                              $(4)-476
 60 INPUT A$                          180 RAND USR 16535
 70 IF A$=""THEN STOP                 190 GOTO 60
```

Notes on next page.

--Editor's Notes----------------------------------

<u>Interger</u>: is a whole number
<u>Most significant digit</u>: that part of a whole number, as in the number 12, the 2 is
the least significant digit, because adding or subtract or performing almost any
other function on it has less effect on the overall value of the number than if
the 1 (most significant digit) was affected.
<u>Floating Point numbers</u>: real numbers
For more background on intergers, Floating Point numbers, real numbers, Most
significant digit get a copy of TS 2068 Intermediate/ Advanced Guide, by Jeff
Mazur, a SAMS book, and start at the beginning.

NEWS, NEW, VIEWS and REVIEWS.........Paul Hill

I have found the new Oliger Disc IF ROM V2.52 defaults to single sided for FORMAT,
and only discovered it after FORMATting and MOVEing a double sided disc to a new
single sided disc! Surprise, surprise! Right on the chip it says "sides=1", I
guess I shoulda known.

Knighted Computers has a new address: Knighted Computers, 803 S. 4th Street,
Fulton, NY 13069.

Gary Lessenberry is dropping Chicago's TS BBS "North Shore" and he had the class
to leave messages around the country stating this. A couple of our local members
had the pleasure of getting on his BBS and he will also be missed. Thanks Gary.

As noted in the last issue of SN, I had problems with PixelPrint, and wrote a
letter to Stan Lemke, the author. Stan wrote back very quickly, and while most of
the problems I was having were cleared up, the printer gets an extra line feed.
After many tries, I could not get any effective printout with PixelPrint. This
software is for a specific type printer, and you must be sure of what your printer
can do, and what the software can do. The advertising for this product should be
very clear in this, otherwise several buyers are going to be disenchanted with the
software. In the last issue of <u>Time Designs Magazine</u>, Stan's ad on the back page
states this printer requirement, but the vendor's ad (on which I made my decision
to buy) is not clear on the printer restrictions. In my case, I wrote the vendor,
Knighted Computers, explained the situation, and requested an exchange. They have
allowed me to do so.

Time Designs Magazine has in the latest issue, a list of all user groups in North
America, and all known vendors, and all newsletters. A section was devoted to the
newsletters. A panel of three people ranked the letters, giving virtually all some
recognition. I figure I may as well throw in my two cents worth, and this is
strictly my opinion.
     Almost every newsletter has its good issues and not so good. LISTing had for
a long time a very, VERY GOOD letter, tied with early Triangle UG Newsletter.
CATS, the Capital Area TS NL has been up and away the BEST for almost every issue.
ZX-Appeal and Sync - Link of Canada have been high quality in content and eye
appeal since we have been fortunate enough to swap with them. Others, such as QZX,
Chicago, Cleveland, Las Vegas, Indiana, Timelinez, SMUG, SLUG, PLOTTER, Ottawa and
Mile High have been regular, consistant, informative and orginial, the blood and
guts of North American TS users. It is nice to have been told you are number one,
but in my book, all of the above are tied for first place, and any not mentioned
a very close second. The real judges of each and every newsletter are the

subscribers, they vote for real, with their checkbooks.

Well, what's good for the goose is good for the gander, how should I rate Time Designs Magazine? What's the competition? Syncware News? I have not subscribed, so I dont know anything about them. Updates?, one year and four issues old, virtually a one man show, and it is full of interesting articles and programs for my favorite machine, the 2068. Bill Jones reports near 100% renewals plus lotsa new subscribers. Compare Time Designs Magazine to SYNC or TS User? SYNC- I remember getting each issue and pouring over it, til each page was covered with finger smudges. TS User -, not quite up to the quality, but lots of articles and ideas. Time Designs Magazine- just about the only one left, and it has had some excellent informative articles on ALL of the TS/Sinclair computers but wont be around forever if it isn't supported with subscriptions and writers! YOU vote for your favorite TODAY- Subscribe!

The cause of the best or better newsletters is the amount of support received from the members of the user group. If no one writes articles, the only thing an editor can do is reprint or fold. Or write his fingers off. No articles, no newsletter.

"Folks, this is where SINCUS NEWS is at; I can not print what I don't have in hand. I can SOAP BOX, I can review what I have, and I can babble on. None of which is going to increase or maintain our current membership. YOU read this, YOU use a TS or Sinclair computer, YOU use software, and YOU have opinions. And You are the U in User Groups. You can help, paying dues and getting a newsletter is half of the deal. Putting on demos, writing an occasional article, asking questions or just putting in your two cents worth will help me help all."

The TS community has been sharing for 5 - 6 years through newsletter swaps. With this Time Designs Magazine issue we became aware of a couple user groups for the first time, and have sent out our latest issue in hopes of establishing new swaps.

Has the idea of a single TS publication entered anyone's mind? Could Updates, Time Designs Magazine and Syncware exist together under one name, putting out a monthly or bi-monthly issue? Production and distribution costs would be cut, and advertising could be concentrated in one magazine. Could all the newsletters submit their articles to this one magazine, and leave the newsletters to meeting notes and swaps? Some newsletters cost almost as much as just one magazine, and contain no where near the info. With 1200 baud modems, late night or weekend transmission rates, all copy could be sent to ONE publisher or ONE of three editors, with some cost effectiveness. If the publisher allowed three sections each under independant editorial control, could something like this exist. If done before economics forces it, the magazine may well develop a strong readership, good ad rates and develop what is left of the North American Sinclair market. The submitting parties could make small change off of providing tape or disc copies of articles and or programs.

Loaning copies of your favorite magazine around will also help kill off a good thing. There are a very limited number of people who want to read anything related to TS computers, and it is further shrunk by part of the reader base "sharing" an issue. I also realize most TS users probably don't rank high in the Fortune 500, and most, if the money were available would have brought a more expensive machine, so individuals look for cost effective measures. If you can support one or more publications that you enjoy, please do, for your own future enjoyment of computer publications. Pass around one issue to show your friends what they are missing by not subscribing, and then let them decide.

SINCUS will support Time Designs Magazine and Syncware News and Updates with this offer- send in a orginial mailing label from either Time Designs Magazine or Syncware or Updates(showing your name/ address and expiration date of JUNE 1989 or later and a check for $8.00 to SINCUS NEWS) and we will extend NEW or RENEWAL subscriptions of SINCUS NEWS by one more issue. (Seven issues of SINCUS NEWS for $8 and a Time Designs Magazine or SYNCWARE or UPDATES label). This offer expires December 31, 1988.

To date Sept 4, only Updates has responded to our letter informing the above publications to our offer and request for free ad space.

UPDATES	TIME DESIGNS	SYNCWARE
1317 Stratford Ave.	29722 Hult Rd	602 S. Mill St.
Panama City, FL 32404	Colton, OR 97017	Louisville, OH 44641

I have been able to get my own system back up and running, still using John's borrowed monitor. As it is a tape system, it is difficult to use (with the speed of discs sitting right next to me), and once the club gets a modem unit, I'm going to explore the possibility of a RS232 connection. All I need is lot's help. Well, with input from Wes and Dave, RS232 connection is ok for data transfer but little else. Back to the drawing board.

    As a personal note, my time is going to become more limited in the upcoming months. I am going to night school at SUNY Binghamton, taking the computer science courses. I arranged my schudule around SINCUS meets. As for the newsletter, I will continue as editor and as group secretary unless the work load dictates otherwise. I'll need your support in articles, and submitting the articles in tape or disc. Any typing will have to been done by volunteers and resubmitted to the author for proofing.

John Colonna and I have been working these past few weeks on old newsletter files of SINCUS NEWS, after getting the Computus Interruptus files together, we decide to try to bring out the rest of the taped files of SN. Working with disc drives it makes a big project managable. Now that fall is approaching time is not on our side. Most of the material is on disc for 1984 to 1986, 1987 is mostly hardcopy. The material on the discs are PART of each newsletter, as some parts were already typed, I just photocopied them. The material some or most of which is done on MScript V5.0, some might be on Tasword. Printer controls maybe still on some of the files. I you want to view them, use PRINTSCRN (on the disc), if you want a rough printout use -MS-TAS- (on the disc). See ad following for details.

News on the August 1988 NW Mini Fair from the Hacker and the Plotter newsletters. Congradulations to The Hacker on <u>First Place</u> in the TDM newsletter contest. Staff from the Hacker attended the Mini FAIR and apparently enjoyed themselves, got to see and meet many of the TS community. New software and hardware still coming out for the TS1000 and 2068. The folks from the Clackamus County Area TSUG, who helped put on the FAIR, were a little disappointed in the small turn out and the speakers who did not show. Those delinquent speakers make life harder for the people who try next time, and make themselves look rather immature. Three cheers and a scroll of the screen to all who took part in the NW Mini Fair of 1988.

-The Great Reprint Sale-

Offer #1- The Computus Interruptus Series by Wes Brzozowski. Available on disc, see details below,* and hardcopy. All orders received for hardcopies by October 15, 1988 get a introductory price of $10 postpaid. Orders mailed after October 15, 1988 will be $15 postpaid. Disc prices will remain the same.

Offer #2-1983/1984 SINCUS NEWS files.
    #3-1985   "   "   "
    #4-1986   "   "   "

Details on disc see below.* Details on contents see previous article.

Reprints are possible but expensive in relation to discs, current photocopies run .15 a single side sheet.

    >Tapes are not yet going to be considered.<>If any soul
    >out there wishes to copy to tape any of the discs or
    >convert our info on to Aerco or other TS disc systems,
    >for distribution, just contact me. I'll include your
    >name and address in future issues of this newsletter.<

* The discs will be available in Oliger and Larken FORMAT, 5.25" 40 track, double or single sided. The setup will include MScript files, "-MS-TAS-"by Bill Jones, "PRINSCRN", a 32/64 col Screen scan by John Colonna, Wes Brzozowski and Paul Hill. Cost will be $5(PP) for the disc to members, $6(PP) to non-members..

This was copied inpart from TIMELINEZ who downloaded it from TECH ECHO. This is on the Owego Free Academy's BBS. Msg # 8091 and under file NukesRus.

For Sale-IBM XT or PS/2 power back up supply

Single board Nuclear Reactor supplies backup power for 12 years. Available in a full length plug in card for the above machines. When card sensors detect a power failure the explosive charges (bolts) eject the moderator and control rods from the reactor core. Within 20 mmsecs the reactor is up to its fully rated power standard of 20Kw. Internal fans dissipate up to 500 cuft of air per sec while in the stand by position. A standard desk size water cooling system allowes you to swap cores should you ever need to. A optional circular viewing port of lead glass lets you view the internal assembly. Also functions as a 10 million candlepower nitelite.
Consider the optional 1000 foot extension cord for protection from undue radiation.
Although not required by law, a 23 volume, 5000 page site evacuation plan has been prewriten, to serve all customers.
Prices start at $12million (US) cash, certified check or postal money order. Price doesnt reflect cost overruns. Please allow 6 years for delivery. Write:

    Nukes R Us
    POB U235
    Los Alamos, NM 43210

From "Nukes R Us"

SUBJECT: Stand by power supply for the IBM PC XT or PS/2.
CORRECTIONS TO OFA BBS MESSAGE AS FOLLOWS:

1- Price as of 9/2/88 is 13.75 million dollars (US). Basic QBX-1 power card.
1a- Many inquiries received on why we only make QBX-1 cards for the IBM PC XT and
the PS/2. We do not trust the manufactoring standards of third world countries
with the possible exception of Pakistan. We have found the RFI from clones to far
exceed our own standards. Research of megadoses of RFI on mice lends some credence
to the belief that RFI can mutate the genes. And the Apple tends to overcook with
the 15Kw power supply.
1b- Plans are available for a small fee, for installing water cooling towers in
your back yard. It is suggested that you get any zoning variations need during the
summer months when your neighbors may be on vacation.
2- An optional circular viewing port (CVP/a) does NOT aid in the core replacement.
Two side latches on each side of the reactor let you quickly swap the radioactive
core should you need to replace it. Radition exposure will hardly exceed the dose
received during a dental x-ray. Make that 5,800 x-rays. Perhaps consider HERO-1
robot from HeathKit for doing your refueling chores.
3- If your computer cannot supply the 400 cu ft per second of forced air for
cooling, consider buying the manufactor's heavy water cooling jacket, and
stainless steel pump. Both will fit under a desk or work bench. See Note #1b for
cooling unit.
4- Not mentioned was the radiation protection kit, which includes a shielding kit
comprised of five (5) self-sticking lead plates and 20 radiation monitoring film
badges. The lead plates mount to the inside of your computer enclosure, insuring
the reduction of harmful gamma rays, which cause soft errors to floppy discs, and
RAM data. And as a protective measure we have included a red and yellow flashing
strobe lite which you mount on top of your monitor. Below a sign reads "A melt
down condition is possible when the lights began to flash, please remove yourself
from the immediate area. When the lights stop flashing you have approximately 10
seconds to evacauate"
5- New and included with each board is the operators seat. Built by Viking and
Vandal Furniture of Denmark, the seat is guaranteed for the life of the twenty
foot rubber band. Be sure and mark the order blank, CATAPULT 1/VV. Please verify
operators station does NOT have a concrete ceiling.
6- As an option you may want to consider a hi-tech operator seat, called EJECTOR
F15, guaranteed to operate as long as the explosive charges are kept dry. As part
of the emergency evacuation proceedure, please ensure the operator's station has
soft wood ceilings. The additional cost is only $1.02 million (US).
7-And last, the following was left off the first message. Because the card can
supply more than enough power for the standard computing station, even with a
printer and hard disk, you can sell the excess power to your utility company, as
provided by law. An add-on phasing and metering kit, (PMK-1) lets you connect your
reactor to the local power grid. Each PMK-1 kit includes standard power sale
contracts and Rural Electrification Board rules and regluatiosn. (It is difficult
to see the keyboard with the stupid red/yellow lights flashing in my eyes)In
addition to the evacuation plan, forms are included to allow you register the name
and address of your reactor site with the Nuclear Regulatory Commission (NRC). As
an option, the seller supplies the plan on MS-DOS compatible diskettes, in
Wordstar format. User-friendly templates let you type in the data allowing your
word processor to create a complete printed document.
For a recorded message call Nukes 'R Us, 1-235-872-6483 or dial 1-235-URANITE, (I
can see better now that blinkin' lite finally went oo..____

Modem tips

--by Paul Hill

Using a TS2068, modem, and Loader V software, and MScript one can create text files, and UPLOAD the files to a BBS or another computer via the modem.

1. Create the text file on MScript or Tasword 2.

2. Save the text to tape or disc (in my case Oliger) SAVE / "TEXT" with the MScript program

3. LOAD Loader V

4. Select #3 LOAD BUFFER it will hold over 27K, and the MScript file max is less than 16.3K.

5. You will then be asked for a FILENAME ? Enter name of file. If you modify the BASIC in the LOADER V program for the disc system you have, Line #61 should be changed.

6. You will be asked to select an option for carriage return. If a machine code program, pick 1. None. If text, you may select a CR after every line or paragraph.

7. After a successful LOAD, a message will say "LOAD complete, press any key", do so and you will be back to the start menu.

8. Select #2 Dialing Menu, pick your BBS, and go through the log on procedure.

9. Once on, and into the Main Board Command Selection, key 'U' for an Upload. After the BBS goes to the files, it will ask for a name. Usually ten characters. max. Then it checks for an identical name, if none, it will give the go ahead for an upload. Sometimes a short description of the file is asked for. Usually you will have between 40 seconds and 1 minute to commence the upload.

10. Key Caps Shift & 8, this will put a menu selection across the bottom of the screen.

11. Key M, this gives you a Menu. Key E to Exit.

12. PRINT USR 24024 <ENTER> and the buffer via X modem will start. Little ++++ will start showing up across the top of the screen.

13. When done, the BBS will tell you, and go on for your next command for the Main Board.

14. If you want to see how your message looks, key 'F' and call up the file you just Uploaded. If you want to download it, then go to the menu, 'D' for buffer menu, 'E' to Erase buffer, and back to terminal mode. 'D' for download, and when the BBS is ready, Caps Shift & 8, 'M' for menu, 'E' for Exit, now in BASIC, PRINT USR 24415 and you will download the file.

SINCUS will leave messages on OFA   BBS-(607)754-3420 or 687-4346

SINCUS NEWS is the newsletter of the Sinclair Computer Users Society, a non profit organization operated by volunteers dedicated to the Sinclair and Timex Sinclair computer user. Any repros of ads, or any product or services mentioned are not an endorsement but an informational service provided to SINCUS members. Views and opinions are not necessarily the those of the society. Any modification to your computer as a result of any article contained in SINCUS NEWS is done at your risk. We do not take responsibility for any typographical errors.

Hello and welcome to NEW members Art Murray, Patchogue, NY; Carl Green, E. Liverpool, OH; Stephen Cordi, Baltimore,MD; Richard Norek, Cheektowaga, NY and Chris Crawford, Gilmer, TX; and thanks to REnewing members, Harold Roemer, Johnson City,TN, Tom Skapinski, Coram, NY, and to local REnewing members, Bill Tilley, Carl Morris, John Colonna, Don Lamen, John and Stanley Livingston, Dave Schoenwetter, Hal Sohn, and Clyde Tackley.

Thanks to John Colonna, Don Lamen, for their help with this issue. Stay healthy!

EXCHANGE DISKS offered by SINCUS

The titles for 4 discs are available for sending a SASE. Swaps are currently available on the Oliger system. Larken DOS disc swaps will soon be available. We only are able to offer 5.25" discs, specify single or double sided, 40 tracks, double density. The discs contain a compilation of programs from SINCUS members, exchanges and from other User Groups, Compuserve, and other bulletin boards. Each disc is offered by SINCUS at cost for $2.50 each (PP). Please indicate which disc(s). Send check or money order to; John Colonna, SINCUS, 28 Guilfoyle Ave., Binghamton, NY 13903.

In addition to the above EXCHANGE Discs, SINCUS also offers:
CLONE a two mode, 2068 tape program copier $6.00 (tape header reader included)
SINCUS NEWS-$8 per year for six issues. See special offer page 6
Computus Interruptus Series (PRINT) special price for limited time. See page 7.
Computus Interruptus Series (DISC) in Oliger and soon Larken Disc formats.
SINCUS NEWS back issue discs. Three available, see page 7 for details.

For information on any of the above please send a SASE, and we will be glad to help. Write: Paul Hill, SINCUS, 1229 Rhodes Rd. Johnson City, NY 13790.